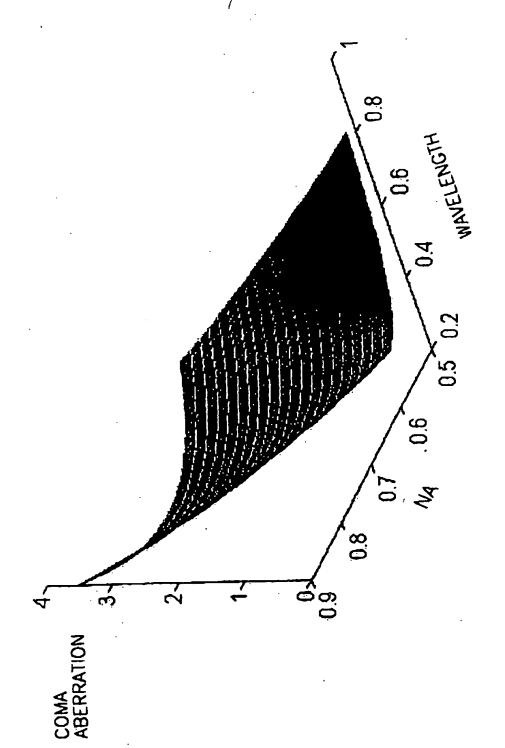
FIG. 1 (PRIOR ART)



PEAK INTENSITY (%) 8 8 8 8 8 ෂ 8 ଞ 2 0.0 ■-- λ=650rm, NA=0.6, t=0.6mm --- λ=400nm, NA=0.6, t=0.6mm —λ=400nm,**NA**=0.65, t=0.6πm λ=400nm.NA=0.75, t=0.6mm 02 0.4 Tilt (deg) 0.6 8.0 10

FIG. 2 (PRIOR ART)



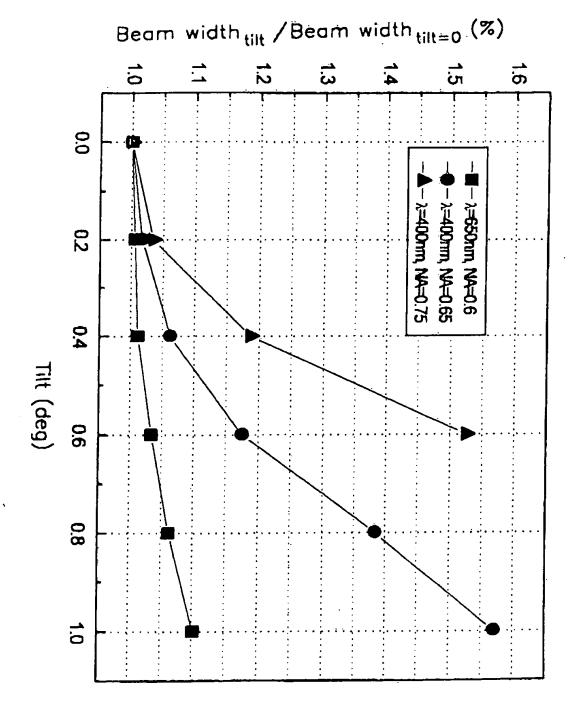


FIG. 4 (PRIOR ART)

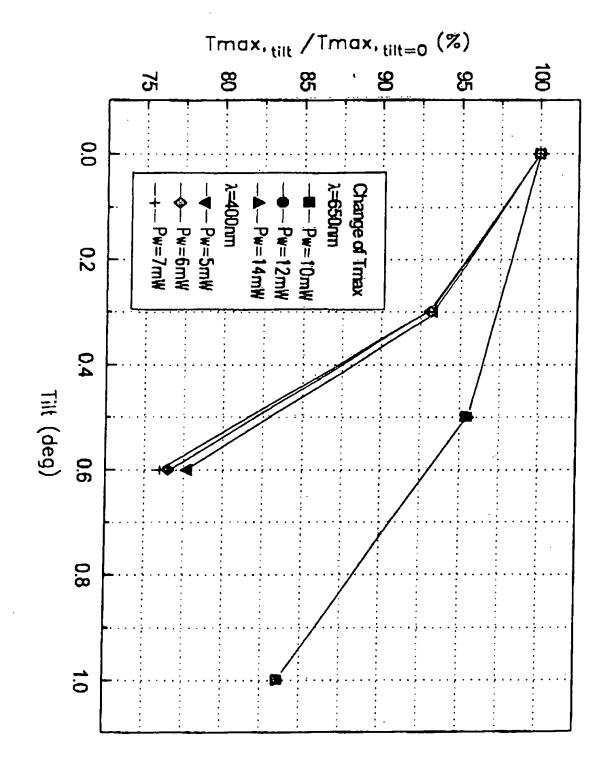
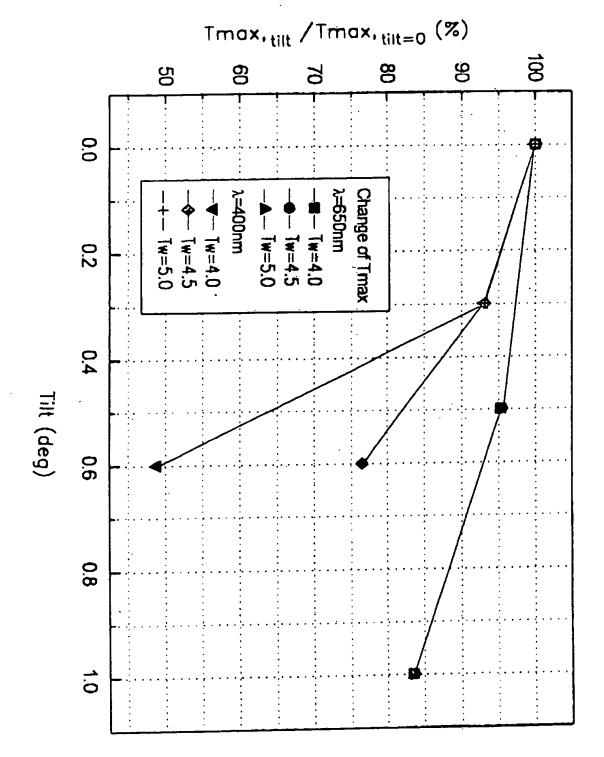
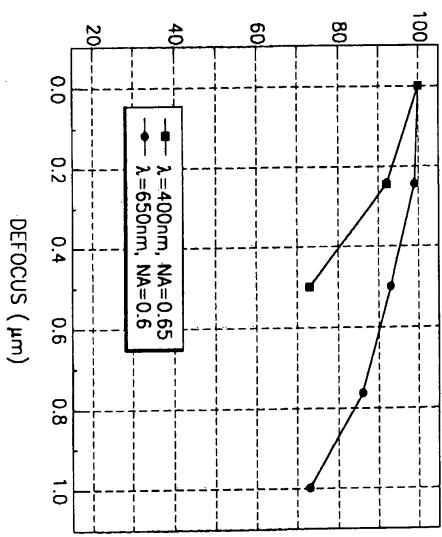


FIG. 5 (PRIOR ART)



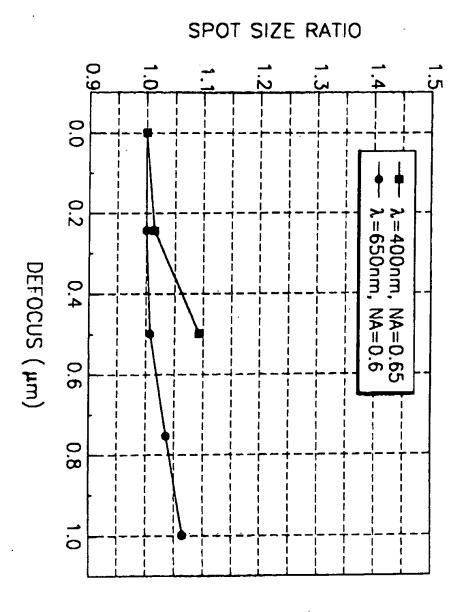
nasnasnasnasna

FIG. 6 (PRIOR ART)



NORMALIZED PEAK INTENSITY (%)

FIG. 7 (PRIOR ART)



INTENSITY (ARBITRARY UNIT) <u>고</u> 0.5 TANGENTIAL DIRECTION OF BEAM 100 150 Ó 200

FIG. 8 (PRIOR ART)

PPEAK, Tilt, DEFOCUS/PPEAK, Tilt, DEFOCUS (%)
SPOT SIZETilt, DEFOCUS/SPOT SIZEnormal (%)

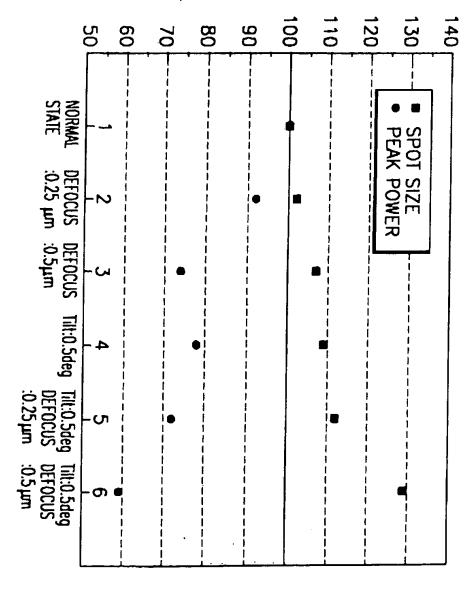
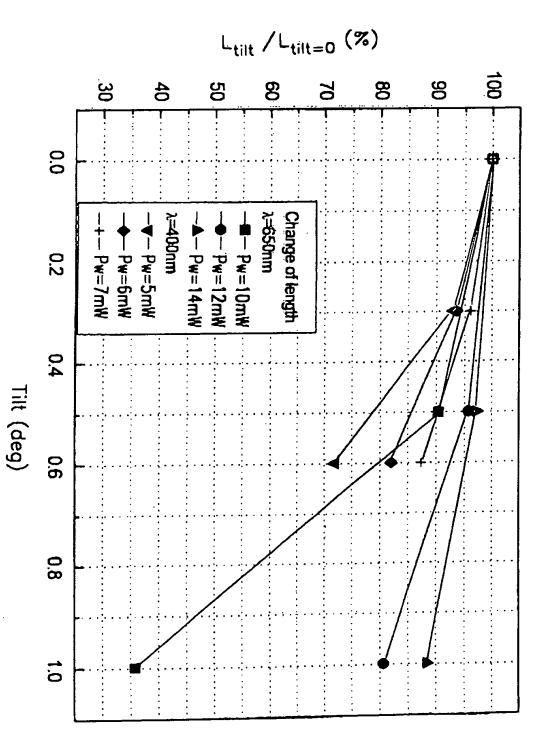
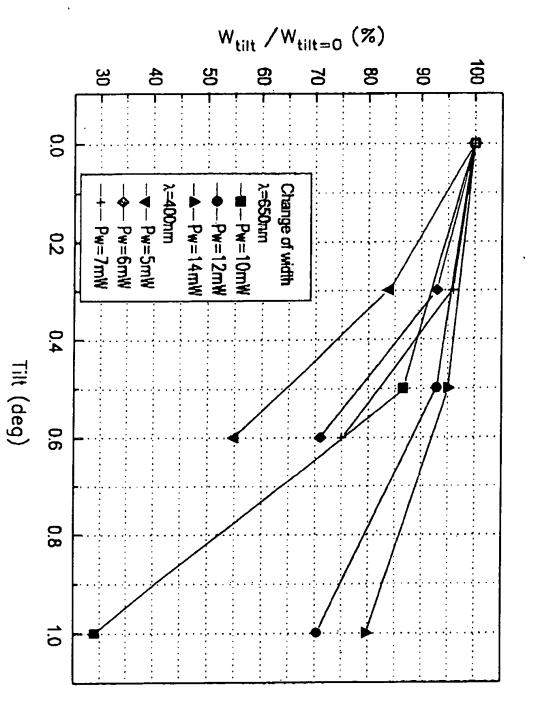


FIG. 9 (PRIOR ART)



TG. 10



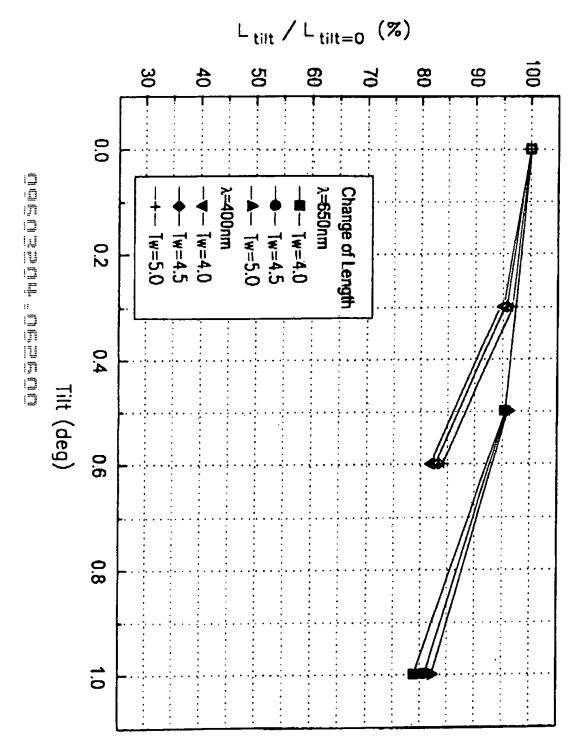
1G. 11

FIG. 12A

Pw (mW)	Tilt (deg)	Tmax (C)	L (nm)	W (nm)
	0	754.6	755.5	345.2
10	0.5	720.0	682.9	298.7
	1.0	630.7	248.6	96.3
	0 ·	901.9	926.6	484.1
12	0.5	860.7	887.5	450.0
	1.0	753.9	747.3	340.5
	0	1048.9	1026.5	577.9
14	0.5	1000.7	997.7	548.7
	1.0	876.6	907.1	459.8

FIG. 12B

Pw (mW)	Tilt (deg)	Tmax (C)	(nm)	W (nm)	
_	0	834.0	518.1	277.9	
5	0.3	778.1	493.8	240.9	
	0.6	648.7	381.0	156.6	
	0	987.1	575.8	325.6	
6	0.3	919.2	551.3	310.6	
	0.6	755.3	479.9	238.1	
	0	1141.9	615.0	368.6	
7	0.3	1062.2	590.7	356.0	
	0.6	867.9	537.3	282.2	



IG. 13

FIG. 14

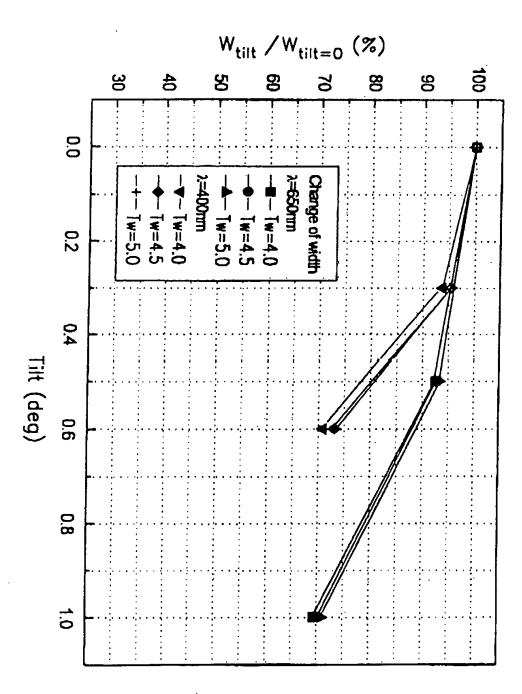
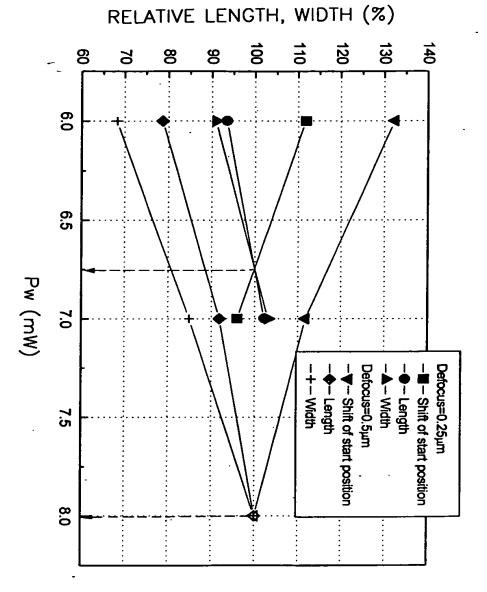


FIG. 15A

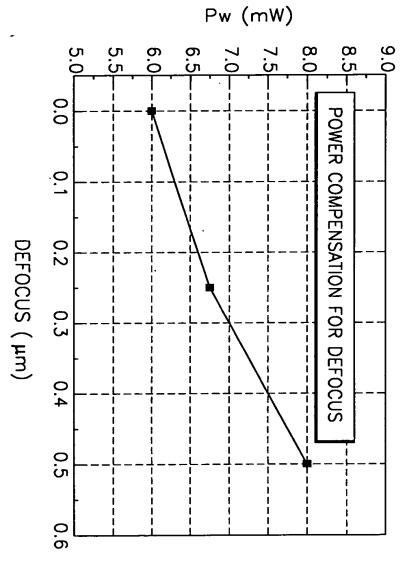
Pw (mW)	Tilt (deg)	Tmax (C)	(nm)	W (nm)
	0	895.8	853.8	47,7.1
4Tw	0.5	853.8	814.5	441.6
	1.0	747.6	673.2	330.6
	0 ·	901.9	926.6	484.1
4.5Tw	0.5	860.7	887.5	450.0
	1.0	753.9	747.3	340.5
	0	908.7	998.2	490.3
5Tw	0.5	866.2	959.1	456.8
	1.0	759.5	820.1	347.3

FIG. 15B

Pw (mW)	Tilt (deg)	Tmax (C)	L (nm)	W (nm)	
	0	980.6	538.2	323.8	
4Tw	0.5	912.0	512.0	303.4	
	1.0	748.9	441.0	229.5	
	0	987.1	575.8	325.6	
4.5Tw	0.5	919.2	551.3	310.6	
	1.0	755.3	479.9	238.1	
	0	993.3	612.3	329.0	
5Tw	0.5	925.2	592.7	315.2	
	1.0	760.1	516.3	241.2	



IG. 16

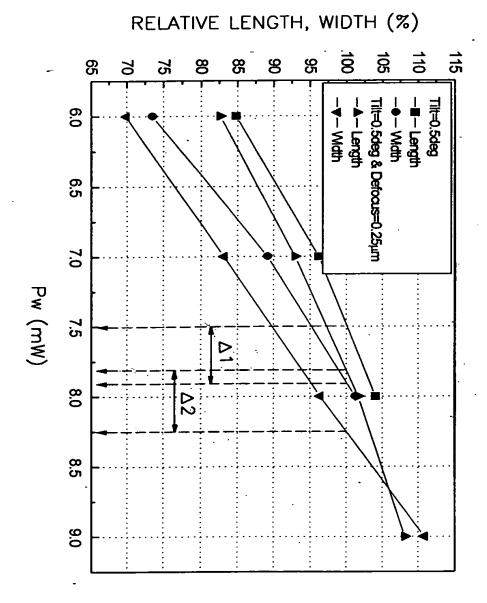


7IG. 17

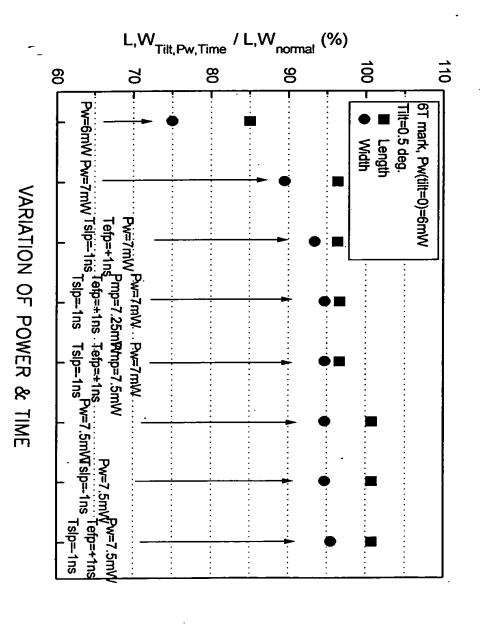
FIG. 18

ĺ
0.231
0.515
0
0.

FIG. 19







ರ

TIME (ns)

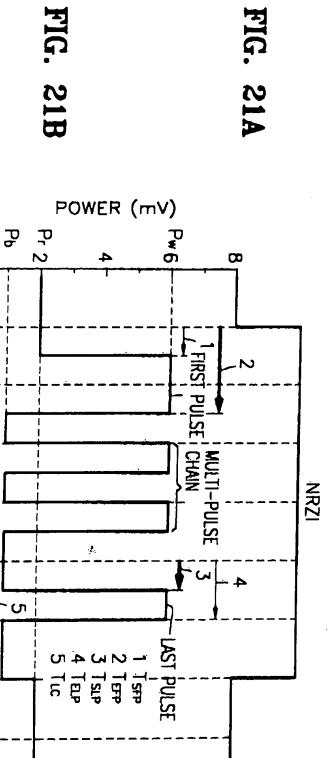
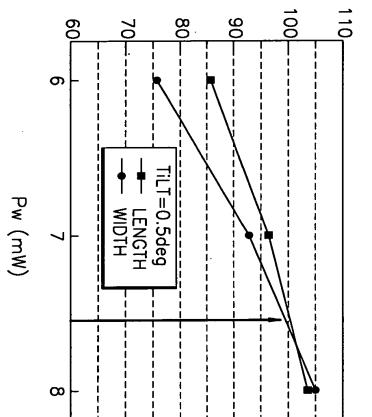


FIG. 22

8mW				7mW		6mW			Pw			
WIDTH	LENGTH	SHIFT OF RECORDING POSITION	WIDTH	LENGTH	SHIFT OF RECORDING POSITION	WIDTH	LENGTH	SHIFT OF RECORDING POSITION	WIDTH	LENGTH	SHIFT OF RECORDING POSITION	Tilt MEASURED ITEM
	<u></u>	<u></u>		> <		<u></u>	<u></u>		0.231	0.515	0	o.
	X		0.242	0.535	0.245	0.214	0.496	0.262	0.174	0.439	0.293	0.5*
0.107	0.372	0.700	0.051	0.090	0.704			スピこしなし				1.0*



 $L,W_{Pw,\ Tilt=0.5}$ / $L,W_{Pw,\ Tilt=0}$ (%)

FIG. 23

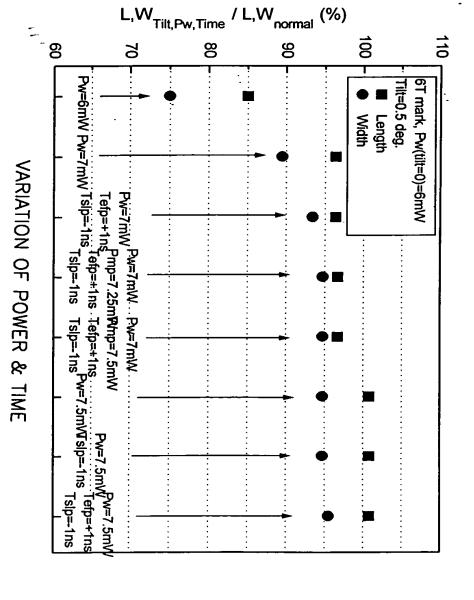
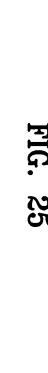
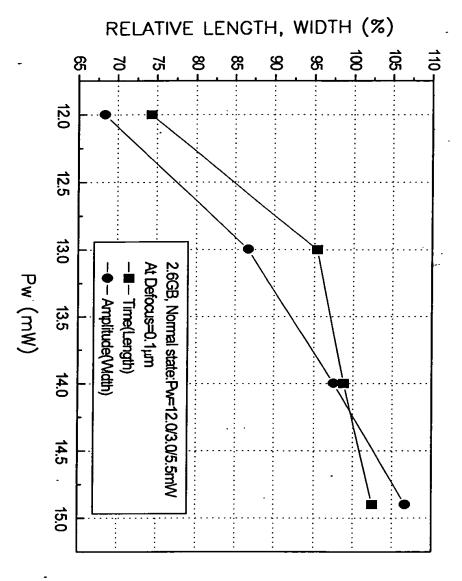


FIG. 24





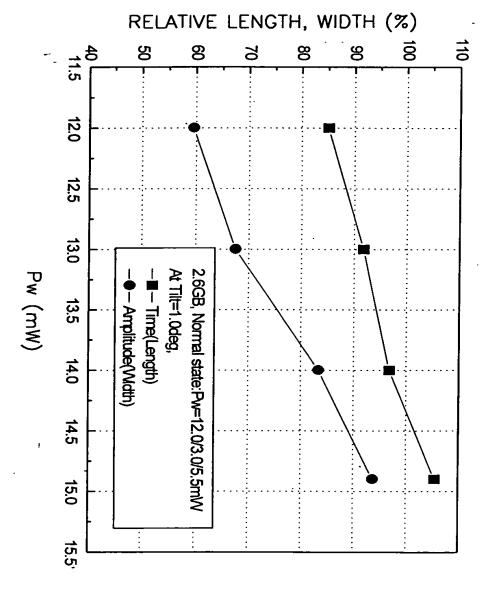
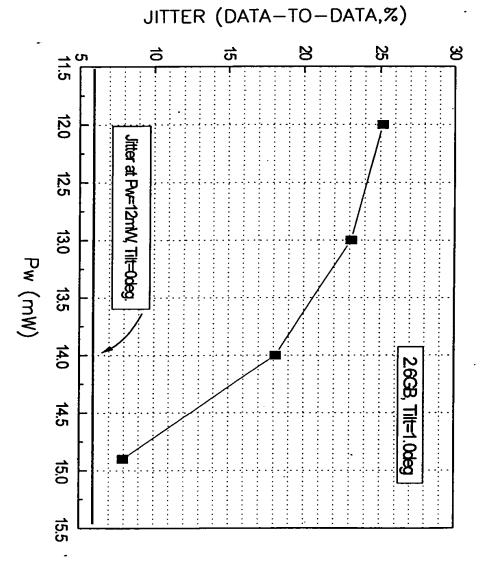


FIG. 26



IG. 27

FIG. 28

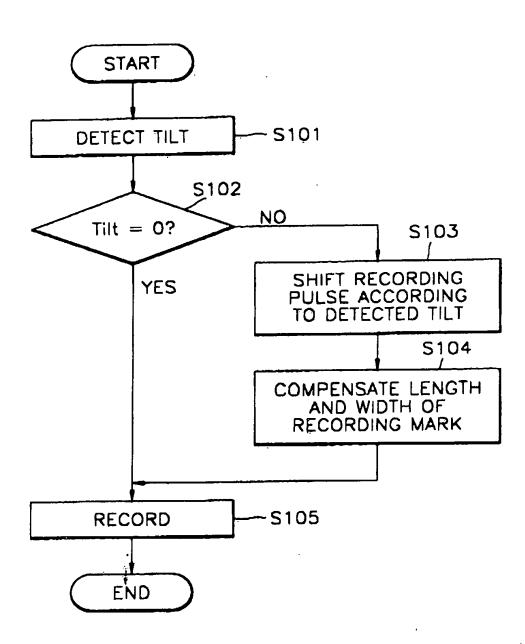


FIG. 29

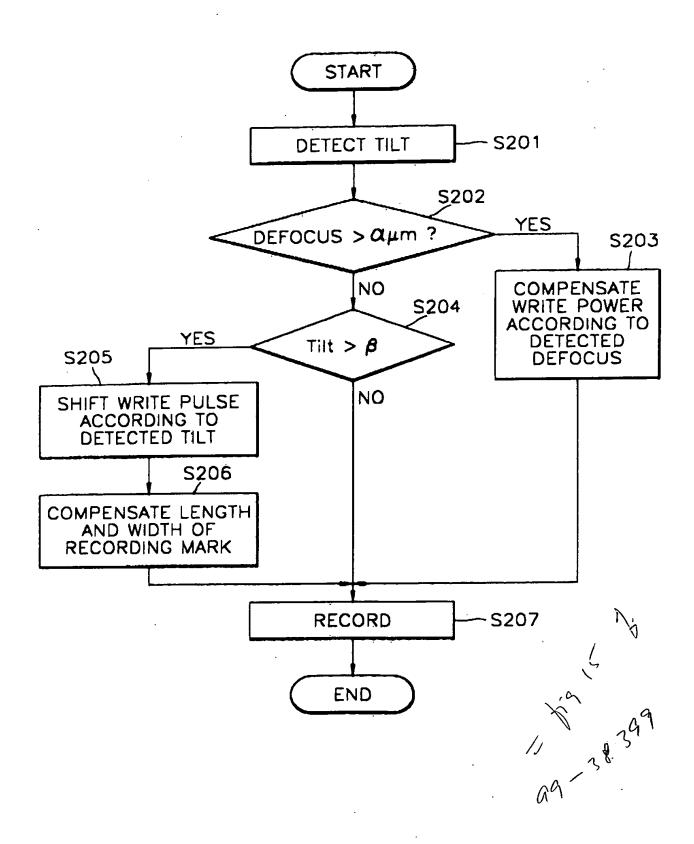


FIG. 30

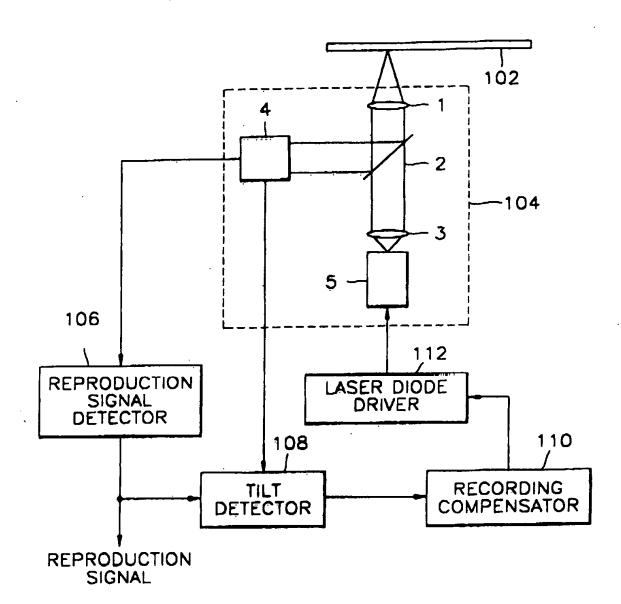


FIG. 31

